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# FAMILY FARM - SOLUTION FOR SUSTAINABLE DEVELOPMENT OF RURAL AREA

EDUARD ALEXANDRU DUMITRU<sup>1</sup>, LAURENȚIU IONUȚ PETRE<sup>2</sup>

## Abstract

*At present, in Romania there is no clear definition of the concept of family farm, and at the level of the European Union, the definition of family farms differs significantly depending on the characteristics of each country. At the same time, there is no classification of these types of farms, depending on the economic dimension, so that no solutions can be identified to support these types of farms, which can have a significant contribution on the development of rural areas. The purpose of the paper is to define the family farm and to determine their economic dimension, depending on the number of members involved in the activity of the farm. Depending on the minimum / average wage per economy, the lower and upper limits of classification of farms among family-type farms were determined.*

**Keywords:** family farm, rural development, Romania, sustainable

**JEL:** Q10, Q12, Q14, Q19

## INTRODUCTION

The classification of agricultural holdings according to the type of agricultural activity and the economic dimension is based on the concept of Standard Production. The Standard output of an agricultural activity (in the vegetable or animal sector) is in fact the average value expressed in lei or euro (monetary units) of gross output, determined on the basis of the prices of agricultural products sold directly to consumers. Standard production is calculated for each type of plant and animal production activity and is determined for each region and for each crop or species.

Also based on the total Standard Production of the agricultural holding, the economic dimension is determined, being expressed in euros. The agricultural activity of a holding is established according to the standard production of each crop or animal species.

An agricultural holding is a form of organization made up of all the units used for agricultural activities and managed by a farmer, located in the territory of the same Member State of the European Union.

The size of a farm is mainly the area of land or the number of animals owned and is expressed in physical quantities (hectares, head of animals).

Depending on the economic dimension, farms and agricultural holdings are classified and defined as follows:

- less than 1,999 euros - subsistence farms that produce entirely for their own consumption;
- 2,000-7,999 euros - semi-subsistence farms that ensure their own consumption and a small part of the agricultural production that sells it;
- 8,000-49,999 euros - small commercial farms that sell more than 50% of the agricultural production they make;
- 50,000-999,999 euros - medium-sized commercial farms / agricultural holdings that sell their entire agricultural production;
- over 1,000,000 euros - large commercial farms / agricultural holdings that sell their entire agricultural production.

In Austria, most farms can be identified as family farms as a basis for agricultural production and the supply of public goods subsumed in terms of multifunctionality.

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Due to different regional and environmental circumstances, family farms in Austria have a wide range of agricultural structures and strategies.

Preliminarily, with regard to the term family farm, it should be noted that the strong differentiation of family farm types is caused by different natural production conditions, market liberalization, structural change and change in social values. This is also due to the fact that some of the key criteria of family farms like family-based labor, family means of production, close relationship between household farm and business farm, high degree of elasticity and durability, succession guaranteed farm within the family.

Family farming in Austria is engaged in the concept of multifunctionality. In addition to the production function, the generation of public goods as a service to society, residents and tourists in rural areas is an essential contribution of agriculture to maintaining prosperous rural areas. Family farms help to maintain the minimum settlement and infrastructure that contributes to the conservation of the landscape and biodiversity and to the strengthening of the local economy through cooperation with regional actors and entrepreneurs. Consequently, Austrian agriculture is considered to be an integral part of the regional economy.

Definition of small farms found in the Polish agricultural sector, according to the 2010 agricultural census, about 1.4 million farms under 5 ha and with an economic size of 4 production standards (SO) or less. This represents 63% of private farms in Poland.

Although the number of these farms is declining, their share is still very high. The analysis of this group showed that most of these small farms do not meet the main criteria for the balanced development of agriculture, which is to contribute to national food needs according to their area and the size of their production base.

As a result, they offer fewer real jobs and the share of agricultural production in their total income decreases.

Generally, a family has an area that can be reduced for garden and farm, as well as a larger area to produce food or other products for both sale and consumption, it can be next to the orchard or located elsewhere. community. These areas together constitute a farm. The family divides its working time and resources between these two areas, each of which is used differently and the two together must meet the food and economic needs of the family.

Small family farming is defined as a type of production in which the internal unit and the productive unit are physically integrated and in which the family contributes to the predominant fraction of the labor force and where the production is directed to both self-consumption and the market. There are three types of family farming:

- Subsistence family farms (where production is generally self-directed);
- Family farming in transition (sale and self-consumption);
- Consolidated family farming (has sufficient support in production and has access to markets).

The aim of the paper is to define the family farm and to determine their economic dimension, depending on the number of members involved in the activity of the farm, in order to encourage the increase of the number of farms of this type, which contribute to the sustainable development of localities. rural environment. Depending on the minimum / average wage per economy, the lower and upper limits of classification of farms among family-type farms were determined. This study is part of the project entitled "Research on ways to make economic efficiency of agricultural holdings in Romania", approved within the Internal Research Plan of the Research Institute for Agricultural Economics and Rural Development.

## **MATERIALS AND METHODS**

The family farm should be an economic activity that supports rural communities. Based on them, rural localities can be harmoniously developed, thus reducing the discrepancies between urban

and rural areas, as well as rejuvenating the rural population, by stopping the exodus of the rural population to urban areas or other countries.

This chapter can be a starting point for defining and determining the family farm, being necessary to conduct additional studies to substantiate the following hypothesis presented.

According to law no. 37/2015 on the classification of farms and agricultural holdings, regulates the unitary framework for the implementation of programs financed from the national budget and community funds, and commercial farms that sell more than 50% of agricultural production, have an economic dimension between 8,000 and 49,000 SO (most likely, family farms can be included in this range).

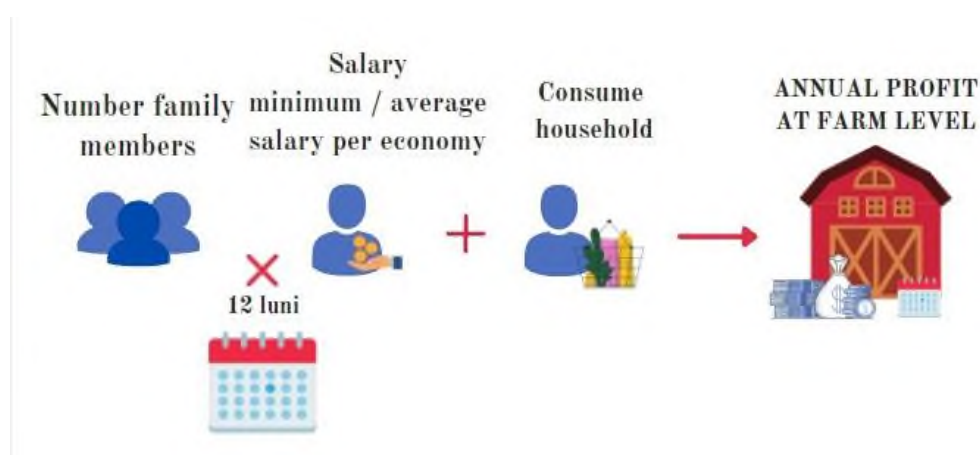
At European level, the family farm is given special importance, and has a different definition from country to country, depending on the particularities of each. At European level, the name "family farm" or "family farmer" can be defined in several ways, referring to the share of agricultural work, the form of ownership and control, as well as the legal status (who is at risk). business).

For example, in Austria the family farm comes in a variety of forms depending on the natural, social and cultural situation, as well as the economic situation and the respective objectives of a farm. The FAO has also established the following definition for this type of farm starting from: "Family farming (also family farming) is a means of organizing agricultural, forestry, fisheries, pastoral and aquaculture production that is managed and operated by a family and based mainly on the family work of both women and men. The family and the farm are linked, evolve and combine economic, environmental, reproductive, social and cultural functions. "

In Spain, "family farming" is a means of organizing agriculture, forestry, pastoral and aquaculture production that is managed and operated by a family, and based mainly on family work, including both women and men.

In order to build viable family farms, it is necessary to build an appropriate legislative framework, which defines these farms according to certain criteria and is drawn up according to the predominant profile of the farm.

**Figure 1. How to set the minimum income for a family farm**



Source: own processing;

A possible definition of the family farm could be transposed as: "the family farm is a means of organizing agriculture, as a whole, owned by one or more persons, the activities of the farm are carried out by family members, and the commercialization of production ensures the main source of income at the family level. At the same time, most of the food consumption comes from our own farm ”.

In order to comply with the above definition, the family farm should reach a minimum income / family member, which corresponds to the standard of living found in our country. For this purpose,

according to the formula presented in the figure below, an annual income at farm level was established, taking into account the following aspects (Figure 1.):

- Number of household members,
- Minimum / average salary per economy,
- Farm profile,
- Household consumption.

In order to determine an economic size of a family-type farm or taking into account the following assumptions:

- H1 – Determining a minimum income on the family farm depending on the number of members;
- H2 – Determining a maximum income for the family farm based on the number of members;
- H3 – Classification of family farms, according to economic size;

To determine the viable economic size of a family farm, the following elements were taken into account:

- Composition of the family farm (number of members),
- Minimum net salary per economy for 2020,
- Average net salary per economy for 2020,
- Average monthly expenditures for food and beverages consumed in rural areas, for 2019
- Average exchange rate for 2020 NBR (1 euro = 4.8371 lei).

**The family farm** has a minimum of 2 people, but can be up to 8 people, being 3 times higher than the existing average. According to INS data, at the level of 2020, the number of households in rural areas was 3.509 million, and the population in rural areas was 8.87 million inhabitants, determining an average of 2.5 inhabitants / household.

**The minimum wage** in the economy in Romania is 2300 lei gross, representing 1386 lei net.

**The average salary** in the economy in Romania is 5429 lei gross, representing 3176 lei net.

**The average monthly expenses** for food and beverages consumed in rural areas, according to the INS, amount to approximately 211 lei / month / person.

The share of farm income (result / profit) in total production was determined in Romania, according to statistical data found on Eurostat, at 37.5% (including subsidies).

To determine the economic dimension, the latest available data were taken as parameters to reflect the most accurate situation of the farms.

## RESULTS AND DISCUSSIONS

Using the calculation method presented above, the economic size of an economically viable family farm was determined to ensure a decent living for family members, as follows:

**Table 1. Determining the economic dimension of the family farm**

No. crt.	Family members	Minimum salary / average salary *	Average monthly expenses for food and beverages consumed	Months	Farm profit (Col. 1 * (2 + 3) * 4	SO VALUE (Col. 5 / exchange rate)	Example - area cultivated with wheat (Col 6 / SO wheat)
0	1	2	3	4	5	6	7
1	2	1386	211	12	38328	21130	34
2	2	3176	211	12	81288	44814	73
3	3	1386	211	12	57492	31695	52
4	3	3176	211	12	121932	67220	109
5	4	1386	211	12	76656	42260	69

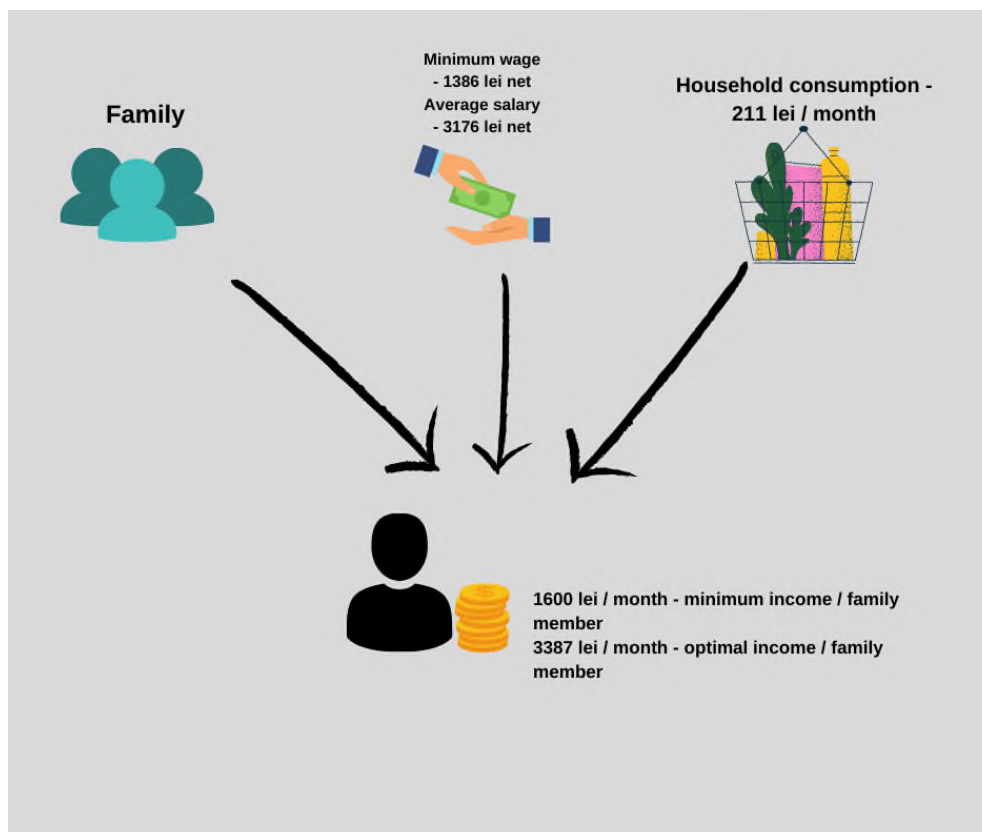
No. crt.	Family members	Minimum salary / average salary *	Average monthly expenses for food and beverages consumed	Months	Farm profit (Col. 1 * (2 + 3) * 4	SO VALUE (Col. 5 / exchange rate)	Example - area cultivated with wheat (Col 6 / SO wheat)
6	4	3176	211	12	162576	89627	146
7	5	1386	211	12	95820	52825	86
8	5	3176	211	12	203220	112034	182
9	6	1386	211	12	114984	63390	103
10	6	3176	211	12	243864	134441	219
11	7	1386	211	12	134148	73955	120
12	7	3176	211	12	284508	156848	255
13	8	1386	211	12	153312	84520	138
14	8	3176	211	12	325152	179255	292

\*depending on the minimum / average wage in the economy, the lower and upper limits were determined, depending on family members

Thus, according to the determinations made, the family farm would fall between an economic dimension of 21130 SO (minimum value) and 179225 SO (maximum value), varying according to members the number of members of the farm (Table 1.).

To make it easier to follow and compare, for example, a two-person family farm with an economic holding size of 21130 SO, would cover an area of 34 hectares (with wheat), while a holding of 8 people, should exploit a maximum area of 292 ha with wheat (Table 1.).

Figure 2. Minimum and optimal income for a member of a family farm



Source: own processing;

Based on the above figure, the minimum income of a family-type holding should be determined by the national minimum gross wage, the number of members, the profile of the holding, and the consumption of the household, which is supposed to be insured from its own production. . By determining the minimum income, measures may be imposed at national level to assist these holdings in obtaining this minimum income. Among the most important measures that can come in support of family farms, in order to reach this scale, which we consider particularly important, we mention (Figure 2.):

- Fiscal measures related to VAT reductions on products sold,
- Location of the sub-measure „6.3. - Support for the development of small farms' could be replaced, in the new NRDP, by a measure on 'Support for family farms', through which beneficiaries can receive funding to ensure their guaranteed minimum income, mentioned above, meeting a number of conditions.
- Measures to finance investments in these types of holdings,
- Direct payment measures for family farms to raise their incomes,
- Measures on social contributions to encourage this type of family-type holding,
- Involvement of authorities in supporting family farms by setting up processing / storage units and spaces,
- Cultivation of species that adapt to market requirements and in accordance with existing availability on farms (a small farm can be reoriented to vegetable crops),
- Involvement of private companies in the purchase of products from family farms creating mutual benefits. A safe market for these farms, and for private companies (supermarkets) can increase sales by promoting the purchase of products that protect the countryside (example: Milka chocolate, which is promoted through TV commercials as being obtained from milk from farms family).

Starting from the fact that in 2016 over 3.4 million agricultural holdings without legal personality were registered and used on average an area of 2.04 hectares, it indicates the predominant character of subsistence and semi-subsistence farms.

However, the number of beneficiaries of subsidies in 2016 was 901 thousand, using an agricultural area of 9.22 million hectares, thus determining an average area of 10.2 hectares (Table 2.).

**Table 2. Evolution of agricultural holdings that received subsidies through A.P.I.A in the period 2010-2016**

Specification	2010	2013	2016	2016/2010 (%)
Number of beneficiaries (number)	1.093.167	1.048.728	901.502	-17,5
Determined area (hectares)	9.503.452	9.863.923	9.223.341	-2,9
Average area of farms receiving subsidies (hectares / farmer)	8,7	9,4	10,2	17,7

*Source: APIA data processing.*

This indicates, on the one hand, that the number of real agricultural holdings is lower than in the statistical data, as most of these holdings are leased by other farmers for the purpose of cultivating agricultural land, as the subsidy is collected on the holding. agricultural. On the other hand, this indicates the degree of degradation of the rural area (in addition to the demographic decline, insufficient development of local infrastructure) by non-cultivation of agricultural land by the rural population, whose main activity seems to no longer exist.

An important measure for the revitalization of the rural area, in which young people will reappear, would be the promotion of family farms, successfully promoted in many other EU countries, such as Austria.

## CONCLUSIONS

With over 3.63 million farms, Romania owns 33.5% of the total number of farms in the U.E., but they represent only 7.5% of the cultivated area in the U.E. For Romania, this discrepancy reflects the dominant character of small farms, respectively a very low average farm area.

A structural attribute of agricultural holdings in Romania that should be noted is the persistence of a very high concentration of holdings with low values of standard production.

Agricultural holdings with legal personality registered a significant increase in 2010 by about 35%, as a result of the impetus given by the National Rural Development Program, which determined farms without legal personality, to be authorized to access these non-reimbursable funds. At the same time, in 2013 there was a decrease in their number due to the inability to adapt to the rules provided by the European Union (example: animal welfare rules).

The tendency of the average agricultural area used on a farm to increase slightly was due to the merger process. This process occurred, on the one hand, due to the impossibility of exploiting agricultural land mainly by the aging population in rural areas, and on the other hand due to the PNDR measures by which they were favored in accessing certain projects, which managed to take over or several agricultural holdings (example: measure 112 - Installation of young farmers).

Insufficient facilities and the promotion of cooperative units have led to a drastic decrease in their number, which has led to a poor sales process by agricultural producers.

In the merger process, the agricultural holdings that used an agricultural area between 5-10 hectares and those between 2-5 hectares were highlighted, while at the same time there was a significant increase of the farms that use agricultural areas larger than 100 hectares. .

The downward trend in the number of agricultural holdings is also recorded in countries such as Bulgaria, Hungary or Poland, amid measures developed under the National Development Programs.

It is necessary to determine a minimum guaranteed income at the level of a family-type farm, starting from the number of household members, the minimum gross wage per economy to which to add the consumption of food at the family level. Based on this income, measures can be taken to help ensure this minimum income on the family farm. It is also absolutely necessary to legislate a definition of a family-type farm in which this minimum income is included.

The next period will be one of particular importance for the future of agricultural holdings. Given the problematic situation facing the rural area, characterized by the aging population, lack of jobs, infrastructure in all respects, the relationship between agriculture and rural space must be seen as a unitary element, designed to encourage the emergence and expansion of farms. family, a process that will lead to the revitalization of the rural space as well as to the provision of the necessary agricultural products for the market.

It is noted that the population of Romania has a sharp downward trend, contrary to the phenomenon encountered worldwide which is characterized by a population explosion, by component countries of Asia, Africa or South America. In this sense, we consider that Romania must take legislative measures and put them into practice in order to ensure the most valuable resource at its disposal, namely agricultural areas. The sale of large areas of agricultural land to various economic operators, especially non-EU ones, should include regulations providing for their obligation to export only finished products, limiting the export of raw materials.

In order to have a record as close as possible to reality and especially to develop a series of solutions regarding agricultural holdings, it is necessary to process data as close as possible to reality. According to the National Institute of Statistics, the data found in the General Agricultural Census (RGA 2002, RGA 2010), the Structural Survey in Agriculture (ASA 2007, ASA 2013) are data that centralize the number of agricultural holdings regardless of their ownership. In other words, an agricultural holding which leases land from several lessors does not appear as a single holding, although it may, if it so wishes, apply for access to European funds as a single holding. Therefore,



the cadastral process is extremely important in order to have concrete data on the real number of agricultural holdings and especially to develop measures appropriate to reality.

According to research methodology, it turned out that the family farm can have an economic size between 21,000 SO and 180,000 SO, so according to the law on classification of agricultural holdings, some family farms can be included among farms that sell 50% of the obtained production (having between 8,000 - 49,999 SO), and a part can be included among the farms of medium size, which have an economic dimension between 50,000 and 999,999 SO.

Starting from these values, we can say that ensuring a minimum income for family members that make up a family farm, can be a solution for the revitalization of the Romanian village.

## REFERENCES

1. Ana I.M, Stoica A., Abordări, tendințe și perspective privind rolul agriculturii în realizarea obiectivelor de economie socială în România și UE-28, *Ecostudent –Revistă de cercetare științifică a studenților economiști*, Nr. 9/2017
2. Andrei, J., Eftimie, M., & Matei, M. (2014). The role of Romanian farms in valuing the inland agricultural potential. *Journal of Food, Agriculture&Environment*, 12(1), 1532-1535.
3. Andrei, J.V., Panait, M., Alecu, A. (2016), *Approaches on EU-28 social agricultre model*, International Conference Competitiveness of Agro-Foodand Environmental Economy CAFEE'2016, The Bucharest University Of Economic Studies, Bucharest, 10-11 November 2016, Ed. ASE, Bucuresti, pp.306-315.
4. Balmann, A. On the Dynamics of Structural Change in Agriculture. Paperpresented at the 96-th EAAESeminarheld in Taenikon, Switzerland, 10-11.01.2006
5. Bădescu, I., Cucu-Oancea, O., Șișeștean, G., 2009. *Tratat de sociologie rurală*. Institutul de Sociologie al Academiei Române, Editura Mica Valahie, București. Bold, I., Buciuman, E., Drăghici N., 2003. *Spațiul rural – definire, organizare, dezvoltare*. Editura Mirton, Timișoara.P. Nistoreanu, (2006), *Ecoturism și turism rural*, Editura ASE, București;
6. Belli, N., Dumitru, D., Popescu, M., Toderoiu, F., 1995 - *Evoluția prospectiva a agriculturii*. Formarea agriculturii durabile si competitive prin forțelepieței, CIDE, București, 86-93;
7. Bonny, S., (1994), *Lespossibilités d'unmodèle de développement durable en agriculture. Le cas de la France*, *Le courier de l'environnement de l'INRA*, n°213, 5–15;
8. Brînzan, O., 2007. *Dezvoltare rurală*. Editura Universității Aurel Vlaicu, Arad;
9. Cîmpoiș, D., 2012, *Dimensiunea teritorială a exploatațiilor agricole în contextul economiei dezvoltării*, in: *Buletinul științific al Universității de Stat „Bogdan Petriceicu Hașdeu” din Cahul* No.2 (8)
10. *Curs 2. Marimea si dimensiunea exploatatiiilor agricole, Cap.IV.Concentrareaproprietatii funciare, dimensiunea si marimeaexploatatiiilor agricole*. Uploadedby Maria Trestianu. <https://www.scribd.com/document/199673246/Curs-2-Marimea-SiDimensiuneaExploatatiiilor-Agricole>, Accessed on Oct.20, 2017
11. Drăgoi, A. (2012), *EUROPE 2020 Strategyandthenewapproach of rural development in theframework of reformed Common AgriculturalPolicy*, *Journal of Global Economics*, Vol. 4, No. 4; European Commission (2014b), *Romania and Common AgriculturalPolicy*, Directorate-General for Agricultureand Rural Development;
12. Hera, C., 2001 – *Cercetarea științificăși agricultura durabilă*, Editura Agris, Redacția Revistelor Agricole, București;
13. KOSTROWICKI, J. *Types of AgriculturalMaps in Europe*. In: NOOR, M. *New Dimensions in Agricultural Geography: Historical dimensions of agriculture* Concept Publishing Company, 1992 ISBN: 8170224012, 9788170224013. 432 p
14. Luca, L., (coordonator), Cionga, C., Giurca, D., 2012, *Consolidarea exploatațiilor agricole*, Editura Economica, Bucuresti
15. Mateoc-Sîrb, Nicoleta, Ungureanu, G., (2010), *Dezvoltarea regională și rurală. Evoluțiișitendințe*, Editura Mirton, Timișoara;
16. Milin I. , *The agricultural exploitations in EU*, *Lucrări științifice, seria I, Vol. X(2)*
17. Otiman, P.I., 1994 – *Agricultura României la cumpăna dintre milenii II și III*. Editura Helicon, Timișoara;
18. Păun, F., 2014, *Studies regarding the situation of rural development in Prahova Countyandthe managerial measures which need to be taken*, *ScientificPapersSeries Management, Economic Engineering in Agricultureand Rural Development*, Vol.14(1), 273-276;
19. Rădulescu C. Valentina – *Dezvoltarea durabilă șiimplicațiileeconomico-financiare ale organizării exploatațiilor agricole*, Editura ASE, București, 2003;
20. *Recensământ agricol - Tipologia și dimensiunea economică a exploatațiilor agricole*, [https://statistica.gov.md/public/files/Recensamint/Recensamint\\_agricol/registru/Tipologie\\_rom.pdf](https://statistica.gov.md/public/files/Recensamint/Recensamint_agricol/registru/Tipologie_rom.pdf)

21. The Ministry of Agriculture and Rural Development (2014) - 2014 – 2020 National Rural Development Programme for 2014-2020 period, Bucharest, Romania;
22. The Ministry of Regional Development and Public Administration (2013) - 2014 – 2020 National Strategy for regional development, Bucharest;
23. The Statistical Office of the European Union (2014) – EUROSTAT- Regions- Regional Statistics, Luxembourg: Eurostat.